
JOINT USERS RESOURCE ALLOCATION PLANNING
(JURAP) MEETING
SEPTEMBER 20, 2001

Jet Propulsion Laboratory
California Institute of Technology

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October 2, 2001
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TO: Distribution

FROM: Eugene S. Burke

SUBJECT: Minutes for the Joint Users Resource Allocation Planning Committee Meeting held September 20, 2001.

NEXT JURAP MEETING:

Thursday, October 18, 2001

JPL Bldg. 303, Room 411 – 1:00 p.m.

Attendees:

R. Bartoo	E. Hampton	K. Martinez	M. Slade
G. Burke	K.Kim	D. Morris	J. Valencia
B. Compton	J. Kehrbaum	K. Moyd	S. Waldherr
D. Doody	N. Lacey	C. Naudet	I. J. Webb
J. Hall	G. Martinez	B. Ryan	

The Joint Users Resource Allocation Planning Committee meets monthly to review the status of Flight Projects and the requirements of other resource users, and to identify future requirements and outstanding conflicts. The last regular meeting was held on September 20, 2001 at the Jet Propulsion Laboratory.

Introductory Remarks - E. Burke
Gene welcomed everyone to the JURAP meeting; the last meeting was held in July. The Resource Allocation Review Board (RARB) met in August 2001 and 10 action items were assigned. The TDRS-I launch slipped to the 31th of October 2001; the launch date will need to be confirmed.

Action Items - D. Morris
Dave Morris reviewed the 10 actions items assigned by the August RARB. Action Item #5 is closed and Action Items 6-10 regard issues during January 2004.

DSN Antenna Downtime Status – J. Valencia

DSS-63 remains out of service until December 10th 2001 for X-band installation, Feed Cone structure modifications and other related tasks. DSS-16 is scheduled for downtime from November 19th to December 16th 2001 for the Servo Drive Replacement. DSS-54 X-band transmitter installation is scheduled for July 2003. DSS-14 and DSS-65 downtime request for the Antenna Controller Replacement task was approved by the August 2001 RARB.

Resource Analysis Team – K. Kim

On going activities include MADB/TIGRAS testing and training. Special studies in progress include DEEP Impact, Galileo Extended Mission, and Genesis. Weeks 45-47 were released to the DSN September 07 2001. Week 48 will be released September 28th 2001. Week 09 through week 11, 2002 will start negotiations in November 2001.

Mid-Range Viewperiods – J. Kehrbaum

John Kehrbaum is working with Roger Bartoo in developing and implementing a procedure that will facilitate the generation of Mid-Range View periods needed by Resource Allocation and Planning (RAP) for performing long range scheduling and planning in TIGRAS. This procedure when completed will be documented as DSMS 814-004. Although the generating and the posting of Mid-Range view periods to the fileserver "lilypad" is currently done by a number of missions on a non-routine basis, it is not a documented, hard mission requirement. The underlining reason for implementing and documenting a procedure for creating Mid-Range view periods, and levying this as a requirement on projects, is that RAP is now using the TIGRAS software-scheduling tool to build schedules that are 8 weeks to 2 years in the future. To build these schedules with TIGRAS requires that mid-range view periods routinely be provided by those missions using RAP scheduling services. The written procedure and a formal request for Mid-Range view periods will be sent to the appropriate projects.

DSN Operations – J. Hodder (No oral presentation)

Goldstone Solar System Radar – M. Slade

Two Goldstone Mercury Relativity radar observations were successfully supported in September 2001. The GSSR X-band transmitter was returned to full operations and met the September 2nd support.

Cosmic Ray Neutrino Detection Experiment – Chuck Naudet

Chuck Naudet, project representative, gave a presentation on the "In Search for Ultra High Energy Cosmic Neutrinos." In support of this experiment, Chuck Naudet is requesting arrayed support time from DSS-14 and DSS-13 in February 2002. The requirement is for the moon to be in view, day or night. Kathryn Martinez will work with Chuck to schedule support time, as it becomes available.

Radio Astronomy / Special Activities – G. Martinez

George underscored the importance of Catalog M&E tracks and stressed that the DSN support requirements are not being met. The requirement is for two Cat M&E supports every 6 weeks, and 3 cycles have passed without any baseline measurements. DDOR and a number of other projects benefit from the data collected from Catalog M&E activities. Mars and MGS benefit by using this data for navigation refining purposes. Kathryn Martinez commented that recent high DSN activities

have precluded the scheduling of Catalog M&E supports. Gene Burke commented that those projects that benefit the most from data collected by Catalog M&E tracks should be willing to negotiate their support time with Catalog M&E.

FLIGHT PROJECTS REPORTS

MAP, ACE, and IMAGE – S. Waldherr

MAP spacecraft operations are nominal and the correction maneuver 2 was successfully completed September 14, 2001. MAP is currently in its 90-day cruise phase to L2 point, with arrival date planned for October 2001. In addition, testing of the new UPL command system is planned at Goldstone for October.

ACE spacecraft operations are nominal. A number of planned attitude maneuvers where supported by the DSN in September, with additional maneuver supports planned in early October. Mission Verification Testing with the 26m automation equipment were completed at the DTF-21 test facility in September. Demonstration tracks using the new UPL command system are planned at Goldstone in October.

IMAGE spacecraft operations are nominal. Mission Verification Testing with the 26m automation equipment were completed at the DTF-21 test facility in September. Demonstration tracks using the new UPL command system are planned at Goldstone in October.

HESSI is scheduled for launch October 15, 2001 and DSN support request is for DSS-16 and DSS-66 only. Canberra is not required. Duration of DSN support is approximately launch plus 18 hours, with 4 to 6 very short passes at each station.

Mars Mission Management Office (MMO) - E. Brower *(No oral presentation)*

Ulysses – I.J. Webb

Spacecraft operations are normal. In late August 2001, Ulysses exercised the Emergency Control Center at Goldstone to support a DSS-14 routine track. Twenty minutes of telemetry and command capability were lost September 3rd because of a DSS-24 cablewrap problem. Beginning in October 2001, a maximum of 2-hour gaps in support may be feasible with a possibility to increase to 4-hour gaps by November. Tentatively, December 1, 2001, may end nutation support. In addition, I.J. Webb commented that, in the near future, the DSN link operator job classification might change to include maintenance. He is interested in knowing how this change will affect the scheduling of DSN antenna maintenance. Gene Burke assigned an action item to Jim Hodder to provide JURAP with information on the Link Operator job classification change and how it affects DSN maintenance.

Galileo – B. Compton

Galileo routine activities include attitude maintenance turn, propulsion maintenance activities, and gyro performance tests. IO encounter (I-31) was conducted on August 5, 2001, and a number of spacecraft related problems were experienced. Data outages before and after the closest approach were caused by a subrefector problem at DSS-43. Next encounter (I-32) is planed for October 16, 2001.

Deep Space 1 – K. Moyd
DS1 is currently thrusting in North or South ecliptic directions until September 9, 2001, then will Earth-point except for observations of Borrelly and trajectory correction maneuvers. Two DDORs were supported to confirm the accuracy of the trajectory derived from Doppler and ranging. Two more short observations of Borrelly are planned before the September 22, 2001 encounter. The Hyper-extended mission has been funded for approximately 6 weeks to analyze the ion engine and solar panel state after three years of use.

Stardust - R. Ryan
The spacecraft is healthy and is presently at 2.7 astronomical units from Earth, with a round-trip light time of forty-five minutes. DSN support has generally been good this reporting period. Stardust entered a safe mode on August 5, 2001, caused by a spacecraft command timing related problem. The problem was cleared and the spacecraft recovered. The Navigational Camera (NAVCAM) calibration activities are ongoing. The camera optics contamination problem experienced earlier in the mission has disappeared. The cause of contamination is unknown. Planning and testing for Comet Wild-2 encounter is ongoing with the possibility of using Asteroid Annefrank to support encounter readiness testing. Superior conjunction will occur on December 25, 2001, and Trajectory Correction Maneuver-7 is planned for March 13, 2002.

Voyager – I. J. Hall
Voyager 1 and Voyager 2 operational status is nominal and overall DSN support is good. A possible Analog to Digital (A/D) converter anomaly was observed on Voyager 1 and the condition is under investigation. Voyager 1 heliocentric distance is 82.3 astronomical units (AU), with a round trip light time (RTLT) of approximately 22h 51m. Voyager 2 heliocentric distance is 64 Au, with a RTLT of approximately 17h 55m.

Cassini - D. Doody
Excellent support provided by the DSN this reporting period. Cassini operations are essentially nominal and minor S/C instrument anomalies and recoveries are worked near-real time. Quiet Cruise Mission Subphase began April 30, 2001 and extends through July 8, 2002. Cassinis's first prime mission science collection, Gravitational Wave Experiment (GWE), begins November 26 and continues through January 5, 2002. The GWE DSN support requirements are for 24 hours of contiguous coverage for 40 days and nights

The next JURAP meeting will be held:

Thursday, October 18, 2001, at JPL
in Bldg. 303, Room 411, at 1:00 p.m.

If you would like to participate in the meeting by teleconferencing, call (818) 354-2626, any time during meeting to be connected.

ACE
Afkhami, F. . . . . GSFC m/s 428.2
Machado, M. J. . . . . GSFC m/s 428.2
Myers, D. A. . . . . GSFC m/s 428.2
Sodano, R. J. . . . . GSFC m/s 581.0

Canberra Deep Space Communications Complex
Churchill, P. . . . . CDSCC
Jacobsen, R. . . . . CDSCC
O'Brien, J. J. . . . . CDSCC
Ricardo, L. . . . . CDSCC
Robinson, A. . . . . CDSCC
Wiley, B. . . . . CDSCC

Cassini
Arroyo, B. 264-235
Chin, G. E 230-310
Doody, D. F. 230-310
Frautnick, J. C. 230-301
Gustavson, R. P. 230-301
Maize, E. H. 230-104
Mitchell, R. T. (PM) 230-205
Webster, J. L. 230-104

Chandra
Gage, K. R. . . . . SAO
Lavoie, A. R. (PM) . . . . . MSFC Org. FD03
Marsh, K. . . . . SAO
Weisskopf, M. C. (PS) . . . . . MSFC Org. SD50
Wicker, D. . . . . SAO
Wright, G. M. . . . . MSFC Org. FD03

Deep Space 1
Hunt, J. C. 230-207
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Rayman, M. D. (PM) 230-207
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Yetter, K. E. 264-235

DSMS / Mission Management Office
Rosell, S. N. 264-235
Varghese, P. 264-235

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Simpson, K.A. 301-335

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Hirst, E. A. 301-180
Sasaki, C. N. (PM) 264-370
Sweetnam, D. N. 264-370
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Yetter, K. E. 264-235

Goldstone Deep Space Communications Complex
DePriest, M. DSCC-37
Holmgren, E. DSCC-25
Massey, K. DSCC-61
McConahy, R. DSCC-33
McCoy, J. DSCC-57
Sturgis, L. DSCC-33

Goldstone Orbital Debris Radar (GODR)
Goldstein, R. M. (PM) 300-227

Goldstone Solar System Radar (GSSR)
Haldemann, A. F. 238-420
Hills, D. L. 238-420
Ostro, S. J. (PS) 300-233
Slade, III, M. A. (PM) 238-420
Wolken, P. R. 507-105

Gravity Probe-B
Keiser, M. (PS) . . . . . Stanford Univ.
Shapiro, Prof. I. I. . . . . Harvard Univ.

IMAGE
Abramo, C. A. 507-120
Burley, R. J. . . . . GSFC m/s 632.0
Green, J. L. . . . . GSFC m/s 630

IPN-ISD / General
Doms, P. E. 303-400
Polansky, R. G. 303-400
Stelzried, C. T. 303-407
Webber, III, W.J. 303-400

IPN-ISD / DSMS Engineering
Freiley, A. J. 303-404
Kimball, K. R. 303-404
Klose, J. C. 303-404
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Sible, Jr., R. W. 303-404
Statman, J. I. 303-404

IPN-ISD / DSMS Operations

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Berman, A. L. 303-403
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Dillard, D. E. 507-120
Frazier, R. 507-120
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Green, J. C. 507-120
Hodder, J. A. 303-403
Knight, A. G. 507-120
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Nevarez, R. E. 502-400
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Roberts, J. P. 502-400
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Short, A. B. 507-120
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Bathker, D. A. 303-402
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Griffith, D. G. 303-402
Holmes, D. P. 303-402
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Luers, E. B. 303-402
Miller, R. B. 303-402
Peng, T. K. 303-402
Poon, P. T. 303-402
Slusser, R. A. 303-402
Wessen, R. R. 303-402
Yetter, B. G. 303-402

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Hincy, W. 600-174
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Morris, D. G. 303-403
Valencia, J. 600-174
Wang, Y-F. 301-165
Zendejas, S. C. 301-165

ISTP (Cluster II)

Abramo, C. A. 507-120
Christensen, J. L. . . . . GSFC m/s 404.0
Dutilly, R. N. . . . . GSFC m/s 581.1
Gurnett, D. . . . . U. of Iowa
Mahmot, R. E. (Acting PM) . . . . . GSFC m/s 444.0
Pickett, J. . . . . U. of Iowa

ISTP (GEOTAIL/POLAR/SOHO/WIND)

Abramo, C. A. 507-120
Alexander, H. 502-320
Bush, R. I. . . . . Stanford Univ.
Carder, M. E. . . . . GSFC 450.C
Dutilly, R. N. . . . . GSFC m/s 581.1
Hearn, S. P. . . . . GSFC m/s 450.C
Mahmot, R. E. . . . . GSFC m/s 444.0
Milasuk-Ross, J. . . . . GSFC m/s 428.5
Miller, K. A. . . . . GSFC m/s 450.C
Mish, W. H. . . . . GSFC m/s 690.0
Nace, E. M. . . . . GSFC m/s 450.8
Pukansky, S. M. . . . . GSFC m/s 450.C

JPL/General

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Woo, H. W. 126-110
Yung, C. S. 238-808

Madrid Deep Space Communications Complex

Chamarro, A. . . . . MDSCC
Rosich, A. . . . . MDSCC

MAP
Abramo, C. A. 507-120
Citrin, E. A. (PM) . . . . . GSFC m/s 410.2
Coyle, S. E. . . . . GSFC m/s 581.0
Dew, H. C. . . . . GSFC m/s 423.0

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Ludwinski, J.B. T-1722
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Theisinger, P. C. (PM) 301-455

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Arroyo, B. 264-235
Brower, E. E. 264-235
Thorpe, T. E. (PM) 264-214
Yetter, K. E. 264-235

Mars Program Office
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Jordan, Jr., J. F. 264-472
McCleese, D. J. 264-426
Naderi, F. M. 264-438

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NASA Headquarters
Costrell, J. A. . . . . Code MT
Geldzahler, B. . . . . Code SR
Hertz, P. . . . . Code SR
Holmes, C. P. . . . . Code SR
Spearing, R. E. . . . . Code M-3

NASA/ARC/General
Campo, R. A. . . . . ARC 244-14

NASA/GSFC/General
Barbehenn, G. M. . . . . GSFC m/s 440.8
Levine, A. J. . . . . GSFC m/s 452.0
Martin, J. B. . . . . GSFC m/s 451.0

NASA/SOMO
Dalton, J. T. . . . . GSFC m/s 720.0
Dowen, A. Z. 303-400
Hall, V. F. . . . . JSC Code TG
Morse, G. A. . . . . JSC Code TA
Thompson, E. W. . . . . JSC Code GA

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Space Infrared Telescope Facility (SIRTF)
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Stone, E.C. (PS - VGR) . . . . . CIT 220-47
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Altunin, V. I. 303-402
Miller, K. J. 264-828
Preston, R.A. (PS) 238-332
Smith, J. G. (PM) 264-828

Other Organizations

Crimi, G. F. . . . . SAIC
Laemmel, G. . . . . DLR-GSOC
Wanke, H. . . . . DLR-GSOC

Please mark any additions, deletions, or corrections to this distribution list and return to:

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JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

Action Item Status From 21 August 2001 RARB

David G. Morris

September 20, 2001

Action Item Summary

AI#	*CP#*	*Year*	*Month(s)*	*Week(s)*	*Subnet*	*System*	*Responsible*	*Due Date*	*Status*
01	**All**	**2003**	**pre-Nov. '03**	**All**	**All**	**DSS**	**A. Salazar**	**10/21/2001**	**Open**

ACTION: DSMS Operations Office shall assess the overall impact of the recommendations to reduce Preventative Maintenance on the all Subnets and to provide the Resource Allocations Planning Team with a risk and budgeting assessment of whether additional maintenance hours are needed. The board noted that many of the Contentions identified in 2003 use DSS Maintenance to relieve the over-subscription and requested that they evaluate the readiness needed to prepare for the expected sustained high use in late 2003 through early 2004. This action should reference the opportunity to perform maintenance activities during extended downtime for all antennas in the nine-month period in late 2002 through early 2003.

Action Item Summary

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
02	N/A	N/A			70M	SVLB	V. Altunin	10/21/2001	Open

ACTION: Request change of name from Space VLBI to something without the word Space. The name causes confusion between two separate but required activities. One is to provide support to an orbiting spacecraft (HALCA, a.k.a. VSOP); the DSN uses 11 meter and 26 meter antennas to track the spacecraft. The second is to co-observe the same radio source as the spacecraft with ground-based radio telescopes; the DSN currently supports using 70-meter antennas at certain frequencies.

Action Item Summary

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
03	14	2003	June – July	26-29	34H	MER B	J. Erickson	9/21/2001	Open

ACTION:MER B shall specify the launch period for the spacecraft. This will clarify the contention and may alter the recommendation for this period.

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
04	16	2003	Oct. – Nov.	43-46	34H	RAT	N. Lacey	10/21/2001	Open

ACTION: Resource Analysis Team shall redistribute the support load so that MER A receives no greater than 20 percent of its support using DSS-55. In addition, MER B noted that they could be scheduled on DSS-55 to support subnet overloads as necessary.

Action Item Summary

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
05	**27,31**	**2003**	**Sept. – Dec.**	**39-51**	**26M**	**RAT** **SOHO**	**N. Lacey** **R. Bush**	**9/14/2001**	**Closed**

ACTION: Due to RARB recommended and project acceptance of deletion for the last four weeks of Helio-Seismology Observation (HSO) in 2003, the SOHO project requested another 30-day period earlier in 2003 to replace this lost observation.

RESPONSE: SOHO accepted the alternate recommendation of continuous coverage during weeks 4-7 (Jan. - Feb.) in 2003.

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
06	**41**	**2004**	**January**	**1**	**34H**	**CAS** **DEEP** **MER A/B**	**R. Mitchell** **J. McKinney** **J. Erickson**	**9/21/2001**	**Open**

ACTION:MER A & B in their Approach phase shall resolve contention support from Canberra and Spain in the first 6 days of week 1 in 2004 with Cassini Gravitational Wave Experiment and Deep Impact's use of two 34 meter antennas for initial acquisition (Canberra).

Action Item Summary

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
07	41-44	2004	January	1-4	34H	MER A/B CAS	J. Erickson R. Mitchell	7/1/2002	Open

ACTION:Provide MER A & B Landing Site coordinates. This will allow better planning of antenna usage in January 2004 during surface operations.

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
08	46	2004	January	1	34B1	MER A NOZO	J. Erickson A. Chang	10/21/2001	Open

ACTION:MER A to study impact of either removing DSS-24 from EDL array in order to provide post MOI support to Nozomi TCM or to investigate the option of maintaining the array while providing MSPA and uplink support to Nozomi from DSS-24.

Action Item Summary

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
09	47	2004	January	2	34B1	DEEP MEX	J. McKinney R. Horttor	2/1/2002	Open

ACTION:Deep Impact shall evaluate the impact of taking regular gaps in post-launch coverage due to Mars Express Orbiter's post MOI support needs over DSS-54.

AI#	CP#	Year	Month(s)	Week(s)	Subnet	System	Responsible	Due Date	Status
10	49	2004	January	4	34B1	ULYS	I.J. Webb	10/21/2001	Open

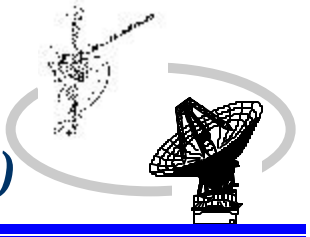
ACTION:Ulysses shall investigate the possibility of using a non-DSN antenna for support or taking a regular two hour gap at Madrid (DSS-54).

JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

Resource Analysis Team

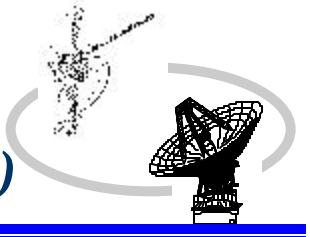
September 20, 2001

Kevin Kim



◆ RESOURCE NEGOTIATION STATUS

- 2001 WEEKS 45 - 47 (THRU 11/25/2001) WAS RELEASED TO DSN ON 09/07/2001
- 2001 WEEK 48 (THRU 12/02/2001) IS DUE TO BE RELEASED ON 09/28/2001
- 2002 WEEKS 09 - 11 (THRU 3/17/2002) WILL GO INTO NEGOTIATIONS STARTING 10/05/2001



- **ON-GOING ACTIVITIES**
  - MADB/TIGRAS TESTING AND TRAINING
  - DEEP IMPACT LOAD STUDY
  - GALILEO EXTENDED MISSION STUDY
  - GENESIS BACKUP RETURN STUDY
  - IMAGE EXTENDED MISSION
  - INTEGRAL LAUNCH CHANGE
  - LUNAR-A LOAD STUDY
  - MEX LOAD STUDY
  - MESSENGER LOAD STUDY
  - MRO LOAD STUDY
  - MUSES-C PSLA REVIEW
  - SGP LOAD STUDY
  - ULYSSES JUPITER ENCOUNTER

- **RARB - AUGUST 14, 2001 LINK ON RAPWEB**
  - REDBOOK Final Version posted.
  - REDBOOK Supplemental Materials posted.

HTTP://RAPWEB.JPL.NASA.GOV

JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

September 20, 2001

DSN ANTENNA DOWNTIME STATUS

Jose Valencia

September 20, 2001

NASA Jet Propulsion Laboratory

DSN Downtime & Test Schedule is located on the RAP WWW Homepage at: http://rapweb.jpl.nasa.gov

Although every effort is made to ensure the accuracy of this Downtime Planning report, changes can and do occur. The DSN 7-Day Schedule takes precedence over this document.

MAJOR DSN DOWNTIME STATUS

- **TASKS IN PROGRESS or REMAINING in 2001**
  - **DSS-63 down from 07/23/01 to 10/10/01**
    - **X-band uplink**
    - **Feed structure modifications**
    - **Counterweight Rebalance**
    - **Hydrostatic Bearing Regrout**
  - **DSS-16 scheduled for downtime 11/19/01 to 12/16/01**
    - **Servo Drive Replacement.**

MAJOR DSN DOWNTIME STATUS (Cont'd)

- CHANGES SINCE LAST JURAP
  - DSS-54 20kw X-band transmitter installation was moved from 10/01/02 to 07/21/03 (task duration 42 days). Initial plan of installing transmitters at DSS-24 and DSS-54 in parallel could not be met.
  - DSS-15 NSP was moved from 08/01/02 to 03/05/03 - 05/01/03 NIB to Antenna Controller Replacement Task (58 days)

MAJOR DSN DOWNTIME STATUS (Cont'd)

- CHANGES SINCE LAST JURAP
  - DSS-65 Antenna Controller Replacement downtime approved by August 2001 RARB and has been scheduled for 05/10/04 - 06/27/04
  - DSS-14 Antenna Controller Replacement downtime approved by August 2001RARB and has been scheduled for 07/05/04 - 10/03/04

MAJOR DSN DOWNTIME STATUS (Cont'd)

- No schedule change to the 20kw X-band transmitter installation planned for DSS-24, DSS-34, DSS-25
  - DSS-24 10/01/02 - 11/22/02
  - DSS-34 02/10/03 - 04/06/03
  - DSS-25 02/10/03 - 04/06/03

MAJOR DSN DOWNTIME STATUS (Cont'd)

- DSN FUTURE DOWNTIME PLANNING
  - DSS-43, DSS-63 Antenna Controller Replacement Task possibly in 2005

MAJOR DSN DOWNTIMES by DATE

Year	Site	Description	Start	End	Duration (Days)	Weeks	Start DOY	End DOY
2001	DSS 63	70M X-Band Uplink	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Feedcone Structure	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Hydrostatic Bearing Regrout	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Counterweight Rebalance	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Az Cablewrap Rehab	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Chiller+HtExch HVAC Mods	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 16	Servo Drive Replacement	11/19/01	12/16/01	28	47-50	323	350
2002	DSS 66	Servo Hydraulic Drive Replacement	06/24/02	07/21/02	28	26-29	175	202
2002	DSS 14	70M Servo Drive Upgrade	07/15/02	09/27/02	75	29-39	196	270
2002	DSS 14	NIB - NSP Implementation	07/15/02	09/27/02	75	29-39	196	270
2002	DSS 24	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
2002	DSS 45	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
2002	DSS 54	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
2002	DSS 24	NIB - 20 KW X-Band TXR Installation	10/01/02	11/22/02	53	40-47	274	326
2002	DSS 24	NIB - KA-Band Encoder Mech Mod-Kit Installation	10/01/02	10/20/02	20	40-42	274	293
2002	DSS 54	NIB - KA Band Encoder Mech Mod Kit Installation	10/01/02	10/20/02	20	40-42	274	293
2002	DSS 43	70M Servo Drive Upgrade	11/25/02	02/09/03	77	48-06	329	040
2002	DSS 43	NIB - Ball-Joint Pad Refurbishment	11/25/02	02/09/03	77	48-06	329	040
2002	DSS 43	NIB - NSP Implementation	12/02/02	02/09/03	70	49-06	336	040
2002	DSS 65	NSP Implementation	12/02/02	02/09/03	70	49-06	336	040
2003	DSS 63	70M Servo Drive Upgrade	02/10/03	04/20/03	70	07-16	041	110
2003	DSS 63	NIB - Ball-Joint Pad Refurbishment	02/10/03	04/20/03	70	07-16	041	110
2003	DSS 63	NIB - NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 25	NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 34	NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 25	NIB - 20 KW X-Band TXR Installation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 34	NIB - 20 KW X-Band TXR Installation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 34	NIB - KA-Band Encoder Mech Mod-Kit Installation	02/10/03	03/02/03	21	07-09	041	061
2003	DSS 15	Antenna Controller Replacement	03/03/03	05/04/03	63	10-18	062	124
2003	DSS 15	NIB - NSP Implementation	03/05/03	05/01/03	58	10-18	064	121
2003	DSS 46	Servo Hydraulic Drive Replacement	05/05/03	06/01/03	28	19-22	125	152
2003	DSS 54	20 KW X-Band TXR Installation	07/21/03	08/31/03	42	30-35	202	243
2003	DSS 45	Antenna Controller Replacement	09/08/03	10/25/03	48	37-43	251	298
2004	DSS 65	Antenna Controller Replacement	05/10/04	06/27/04	49	20-26	131	179
2004	DSS 14	Antenna Controller Replacement	07/05/04	10/03/04	91	28-40	187	277

MAJOR DSN DOWNTIMES by SITE by Year

2001	DSS 16	Servo Drive Replacement	11/19/01	12/16/01	28	47-50	323	350
2001	DSS 63	70M X-Band Uplink	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Feedcone Structure	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Hydrostatic Bearing Regrout	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Counterweight Rebalance	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Az Cablewrap Rehab	07/23/01	10/10/01	80	30-41	204	283
2001	DSS 63	NIB - Chiller+HtExch HVAC Mods	07/23/01	10/10/01	80	30-41	204	283
2002	DSS 14	70M Servo Drive Upgrade	07/15/02	09/27/02	75	29-39	196	270
2002	DSS 14	NIB - NSP Implementation	07/15/02	09/27/02	75	29-39	196	270
2002	DSS 24	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
2002	DSS 24	NIB - 20 KW X-Band TXR Installation	10/01/02	11/22/02	53	40-47	274	326
2002	DSS 24	NIB - KA-Band Encoder Mech Mod-Kit Installation	10/01/02	10/20/02	20	40-42	274	293
2002	DSS 43	70M Servo Drive Upgrade	11/25/02	02/09/03	77	48-06	329	040
2002	DSS 43	NIB - Ball-Joint Pad Refurbishment	11/25/02	02/09/03	77	48-06	329	040
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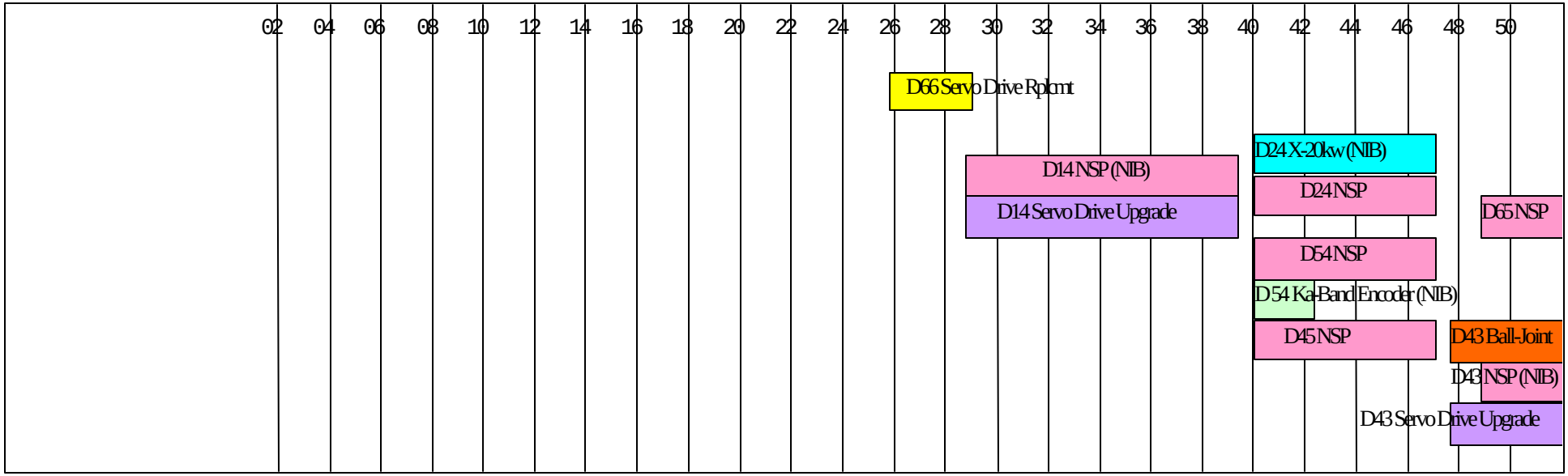
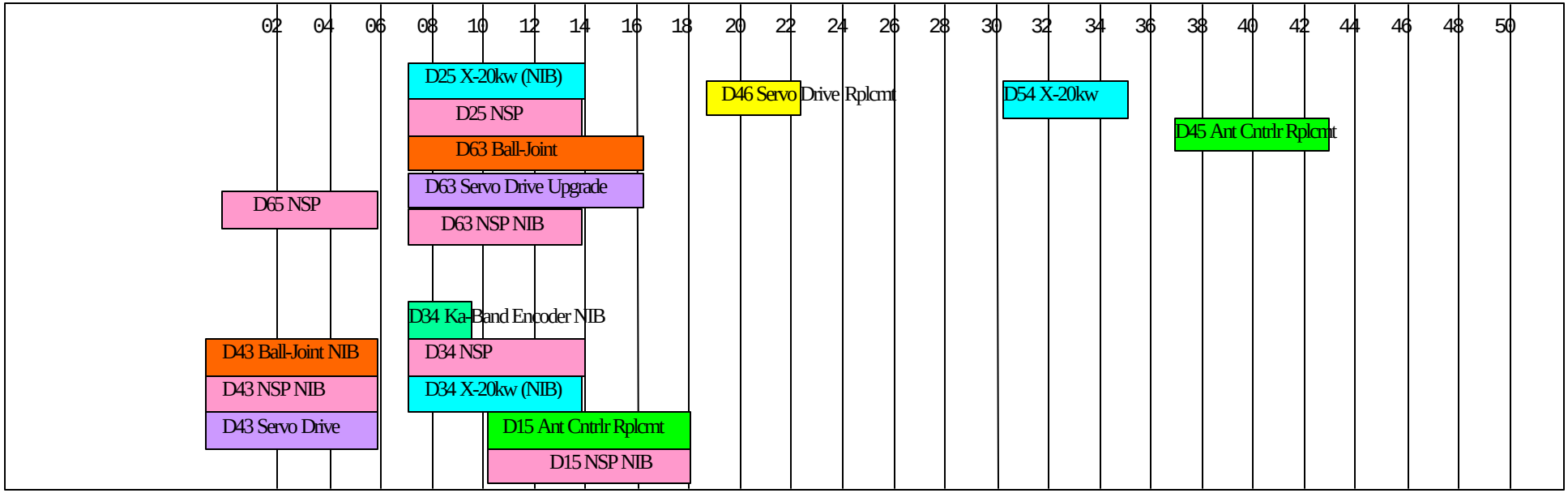
2002	DSS 45	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
2002	DSS 54	NSP Implementation	10/01/02	11/22/02	53	40-47	274	326
2002	DSS 54	NIB - KA Band Encoder Mech Mod Kit Installation	10/01/02	10/20/02	20	40-42	274	293
2002	DSS 65	NSP Implementation	12/02/02	02/09/03	70	49-06	336	040
2002	DSS 66	Servo Hydraulic Drive Replacement	06/24/02	07/21/02	28	26-29	175	202
2003	DSS 15	Antenna Controller Replacement	03/03/03	05/04/03	63	10-18	062	124
2003	DSS 15	NIB - NSP Implementation	03/05/03	05/01/03	58	10-18	064	121
2003	DSS 25	NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 25	NIB - 20 KW X-Band TXR Installation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 34	NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 34	NIB - 20 KW X-Band TXR Installation	02/10/03	04/06/03	56	07-14	041	096
2003	DSS 34	NIB - KA-Band Encoder Mech Mod-Kit Installation	02/10/03	03/02/03	21	07-09	041	061
2003	DSS 45	Antenna Controller Replacement	09/08/03	10/25/03	48	37-43	251	298
2003	DSS 46	Servo Hydraulic Drive Replacement	05/05/03	06/01/03	28	19-22	125	152
2003	DSS 54	20 KW X-Band TXR Installation	07/21/03	08/31/03	42	30-35	202	243
2003	DSS 63	70M Servo Drive Upgrade	02/10/03	04/20/03	70	07-16	041	110
2003	DSS 63	NIB - Ball-Joint Pad Refurbishment	02/10/03	04/20/03	70	07-16	041	110
2003	DSS 63	NIB - NSP Implementation	02/10/03	04/06/03	56	07-14	041	096
2004	DSS 14	Antenna Controller Replacement	07/05/04	10/03/04	91	28-40	187	277
2004	DSS 65	Antenna Controller Replacement	05/10/04	06/27/04	49	20-26	131	179

ANTENNA DOWNTIME CHART

2002



2003



JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

SPECIAL REPORT

Mid-Range Viewperiods

John Kehrbaum

September 20, 2001

DSN User / Mission Planning Set

2001 - 2011

Current date for Mid-Range Scheduling: 15-Mar-02

ONGOING/PLANNED PROJECTS									
Project	Acronym	Launch or Start	EOPM	EOEM	DSN SCID	NSS VP File	Mid-Range VP File	Mid-Range End Date	Mid-Range Schedule Weeks of Margin
DSN VLBI Clock Sync and Catalog M&E	DSN	--	--	--					
DSS Maintenance	DSS	--	--	--					
European VLBI Network	EVN	--	--	--					
Ground Based Radio Astronomy	GBRA	--	--	--					
Space Geodyssey	SGP	--	--	--					
Voyager 2	VGR2	08/20/77	10/15/89	12/31/19	32	03230.vue		31-Dec-02	41
Voyager 1	VGR1	09/05/77	12/31/80	12/31/19	31	03118.vue		31-Dec-02	41
Goldstone Solar System Radar	GSSR	04/01/85	--	--					(52)
Galileo	GLLO	10/18/89	12/07/97	09/21/03	77	07761.vue		21-Sep-03	79
Ulysses	ULYS	10/06/90	09/11/95	12/31/04	55	05525.vue		31-Dec-01	(11)
ISTP - Geotail	GTL	07/24/92	07/24/95	09/30/05	1	00118.vue	001_ext.vue	31-Dec-02	41
ISTP - Wind	WIND	11/01/94	11/01/97	09/30/05	8	00818.vue		6-Jun-03	64
Space VLBI	SVLB	02/01/95	12/31/03	- - -					(52)
ISTP - SOHO	SOHO	12/02/95	05/02/98	12/30/05	21	02118.vue	021_ext.vue	28-Apr-04	110
ISTP - Polar	POLR	02/22/96	08/23/97	09/30/05	13	01318.vue		25-Sep-03	79
Gravity Probe B	GPB	06/01/96	10/31/03	TBD					(52)
Mars Global Surveyor	MGS	11/07/96	02/01/01	06/01/04	94	09405.vue		31-May-02	11
Highly Advanced Laboratory for Communications and Astronomy	VSOP	02/12/97	09/30/01	02/28/02					(0)
Advance Composition Explorer	ACE	08/25/97	02/01/01	01/31/05	92	09218.vue		30-Nov-01	(15)
Cassini	CAS	10/15/97	06/30/08	06/30/10	82	08205.vue		1-Jul-04	119
Nozomi (Planet-B)	NOZO	07/03/98	12/31/05	TBD	178	17805.vue		1-Jan-02	(11)
Deep Space 1	DS1	10/24/98	09/19/99	12/06/01	30	03005.vue		31-Dec-01	(0)
Stardust	SDU	02/07/99	01/14/06	- - -	29	02905.vue		30-Dec-01	(11)
Chandra X-ray Observatory	CHDR	07/23/99	07/23/04	07/23/09	151	15118.vue	151_ext.vue	30-Dec-02	41
Imager for Magnetopause-to-Aurora Global Exploration	IMAG	03/25/00	05/30/02	05/30/04	166	16618.vue	166_ext.vue	1-Jan-03	41
Cluster 2 - S/C #2 (Samba)	CLU2	07/16/00	02/15/03	09/19/05	185	18519.vue	185_ext.vue	9-May-02	7
Cluster 2 - S/C #3 (Rumba)	CLU3	07/16/00	02/15/03	09/19/05	194	19419.vue	194_ext.vue	9-May-02	7
Cluster 2 - S/C #1 (Salsa)	CLU1	08/09/00	02/15/03	09/19/05	183	18319.vue	183_ext.vue	9-May-02	7
Cluster 2 - S/C #4 (Tango)	CLU4	08/09/00	02/15/03	09/19/05	196	19619.vue	196_ext.vue	9-May-02	7
2001 Mars Odyssey	M01O	04/07/01	08/01/04	09/19/07	53	05305.vue		31-May-02	11
Microwave Anisotropy Probe	MAP	06/30/01	10/01/03	10/01/06	165	16518.vue	165_ext.vue	23-Jun-02	14
Genesis	GNS	08/08/01	09/08/04	- - -	47	04718.vue		31-Dec-02	41
Comet Nucleus Tour (CONTOUR)	CNTR	07/01/02	09/05/08	TBD	200			19-Jul-03	70
Space Infrared Telescope Facility	SRTF	07/15/02	09/14/07	- - -	79				17
RadioAstron*	RADA	10/01/02	10/01/07	TBD	59				28
International Gamma Ray Astrophysics Lab	INTG	10/17/02	12/18/04	12/18/07	198				30
MUSES - C	MUSC	12/14/02	06/05/07	- - -	188				39
Rosetta	ROSE	01/13/03	07/10/13	- - -					43
Mars Express Orbiter	MEX	05/23/03	02/11/06	08/03/08					62
Mars Exploration Rover - A	MERA	05/30/03	04/06/04	- - -	43				63
Mars Exploration Rover - B	MERB	06/27/03	05/10/04	- - -	45				67
Deep Impact	DEEP	01/02/04	08/05/05	- - -	140				94

ADVANCED PLANNING PROJECTS				
Project	**Acronym**	**Launch or Start**	**EOPM**	**EOEM**
Lunar - A	LUNA	08/09/03	03/03/04	- - -
Messenger	MSGR	03/10/04	04/06/10	- - -
Mars Reconnaissance Orbiter	MRO	08/08/05	12/31/10	
Stereo Ahead	STA	11/12/05	02/18/08	02/18/11
Stereo Behind	STB	11/12/05	02/18/08	02/18/11
StarLight	SL	06/06/06	11/30/06	- - -
Mars Smart Lander 2007	M07L	09/04/07	08/19/10	TBD
Mars Competed Scout 2007	M07S	09/04/07	11/19/08	TBD
Mars CNES Orbiter 2007	M07O	09/09/07	08/11/08	08/12/10
Mars ASI/NASA Telecommunications Orbiter 2007	M07T	09/09/07	08/09/18	TBD
ARISE	ARSE	01/01/08	01/01/13	- - -
Highly Advanced Laboratory for Communications and Astronomy	VSP2	01/01/08	01/01/13	- - -
Europa Orbiter	EURO	03/15/08	03/10/12	TBD
Mars ASI/NASA Science Orbiter 2009	M09O	10/04/09	08/29/12	TBD
Mars CNES MSR Lander 2011	M11L	10/30/11	09/10/14	TBD
Mars CNES MSR Orbiter 2011	M11O	10/30/11	07/22/14	TBD

DSN User / Mission Planning Set

2001 - 2011

ONGOING/PLANNED PROJECTS				
Project	**Acronym**	**Launch or Start**	**EOPM**	**EOEM**
DSN VLBI Clock Sync and Catalog M&E	DSN	--	--	--
DSS Maintenance	DSS	--	--	--
European VLBI Network	EVN	--	--	--
Ground Based Radio Astronomy	GBRA	--	--	--
Space Geodyssey	SGP	--	--	--
Voyager 2	VGR2	08/20/77	10/15/89	12/31/19
Voyager 1	VGR1	09/05/77	12/31/80	12/31/19
Goldstone Solar System Radar	GSSR	04/01/85	--	--
Galileo	GLLO	10/18/89	12/07/97	09/21/03
Ulysses	ULYS	10/06/90	09/11/95	12/31/04
ISTP - Geotail	GTL	07/24/92	07/24/95	09/30/05
ISTP - Wind	WIND	11/01/94	11/01/97	09/30/05
Space VLBI	SVLB	02/01/95	12/31/03	- - -
ISTP - SOHO	SOHO	12/02/95	05/02/98	12/30/05
ISTP - Polar	POLR	02/22/96	08/23/97	09/30/05
Gravity Probe B	GPB	06/01/96	10/31/03	TBD
Mars Global Surveyor	MGS	11/07/96	02/01/01	06/01/04
Highly Advanced Laboratory for Communications and Astronomy	VSOP	02/12/97	09/30/01	02/28/02
Advance Composition Explorer	ACE	08/25/97	02/01/01	01/31/05
Cassini	CAS	10/15/97	06/30/08	06/30/10
Nozomi (Planet-B)	NOZO	07/03/98	12/31/05	TBD
Deep Space 1	DS1	10/24/98	09/19/99	12/06/01
Stardust	SDU	02/07/99	01/14/06	- - -
Chandra X-ray Observatory	CHDR	07/23/99	07/23/04	07/23/09
Imager for Magnetopause-to-Aurora Global Exploration	IMAG	03/25/00	05/30/02	05/30/04
Cluster 2 - S/C #2 (Samba)	CLU2	07/16/00	02/15/03	09/19/05
Cluster 2 - S/C #3 (Rumba)	CLU3	07/16/00	02/15/03	09/19/05
Cluster 2 - S/C #1 (Salsa)	CLU1	08/09/00	02/15/03	09/19/05
Cluster 2 - S/C #4 (Tango)	CLU4	08/09/00	02/15/03	09/19/05
2001 Mars Odyssey	M01O	04/07/01	08/01/04	09/19/07
Microwave Anisotropy Probe	MAP	06/30/01	10/01/03	10/01/06
Genesis	GNS	08/08/01	09/08/04	- - -
Comet Nucleus Tour (CONTOUR)	CNTR	07/01/02	09/05/08	TBD
Space Infrared Telescope Facility	SRTF	07/15/02	09/14/07	- - -
RadioAstron*	RADA	10/01/02	10/01/07	TBD
International Gamma Ray Astrophysics Lab	INTG	10/17/02	12/18/04	12/18/07
MUSES - C	MUSC	12/14/02	06/05/07	- - -
Rosetta	ROSE	01/13/03	07/10/13	- - -
Mars Express Orbiter	MEX	05/23/03	02/11/06	08/03/08

DSN User / Mission Planning Set

2001 - 2011

Mars Exploration Rover - A	MERA	05/30/03	04/06/04	- - -
Mars Exploration Rover - B	MERB	06/27/03	05/10/04	- - -
Deep Impact	DEEP	01/02/04	08/05/05	- - -

* Planning dates

DSN User / Mission Planning Set

2001 - 2011

ADVANCED PLANNING PROJECTS				
Project	**Acronym**	**Launch or Start**	**EOPM**	**EOEM**
Lunar - A	LUNA	08/09/03	03/03/04	- - -
Messenger	MSGR	03/10/04	04/06/10	- - -
Mars Reconnaissance Orbiter	MRO	08/08/05	12/31/10	
Stereo Ahead	STA	11/12/05	02/18/08	02/18/11
Stereo Behind	STB	11/12/05	02/18/08	02/18/11
StarLight	SL	06/06/06	11/30/06	- - -
Mars Smart Lander 2007	M07L	09/04/07	08/19/10	TBD
Mars Competed Scout 2007	M07S	09/04/07	11/19/08	TBD
Mars CNES Orbiter 2007	M07O	09/09/07	08/11/08	08/12/10
Mars ASI/NASA Telecommunications Orbiter 2007	M07T	09/09/07	08/09/18	TBD
ARISE	ARSE	01/01/08	01/01/13	- - -
Highly Advanced Laboratory for Communications and Astronomy	VSP2	01/01/08	01/01/13	- - -
Europa Orbiter	EURO	03/15/08	03/10/12	TBD
Mars ASI/NASA Science Orbiter 2009	M09O	10/04/09	08/29/12	TBD
Mars CNES MSR Lander 2011	M11L	10/30/11	09/10/14	TBD
Mars CNES MSR Orbiter 2011	M11O	10/30/11	07/22/14	TBD

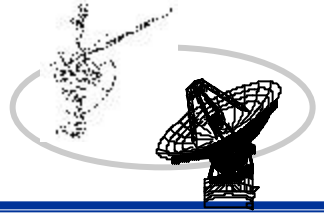
DSN Operations

Jim Hodder

September 20, 2001

NASA Jet Propulsion Laboratory

JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

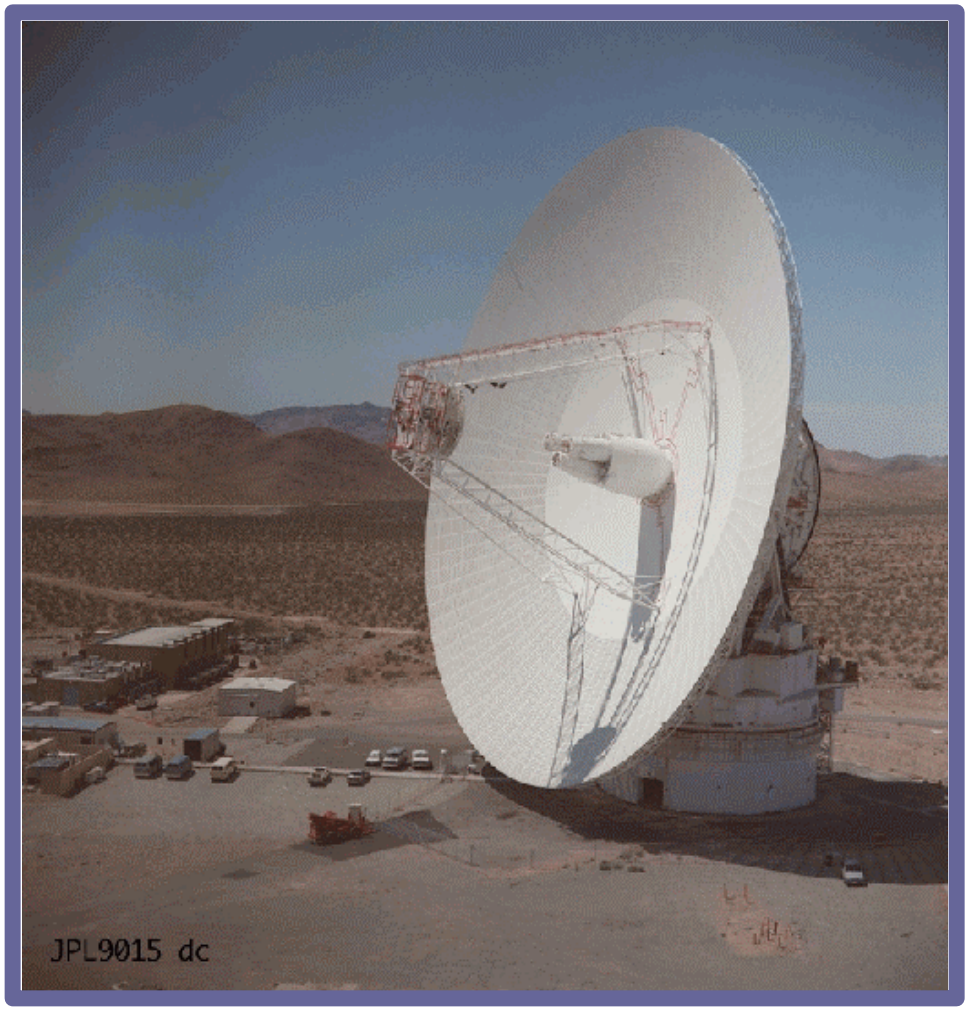


DSN System Availability

Data Type	July 2001	August 2001
Telemetry	99.2%	98.9%
Tracking	98.5%	99.5%
Command	99.1%	98.0%
Monitor	99.5%	98.7%
Radio Science	99.8%	100%
VLBI	96.8%	95.2%

- Work at DSS 63 is proceeding ahead of schedule and the antenna may be returned to service early. The early return to service date is still not firm. The NOPEs will be contacting the projects to discuss conducting demonstration passes as soon as it is firm.

Goldstone Solar System Radar



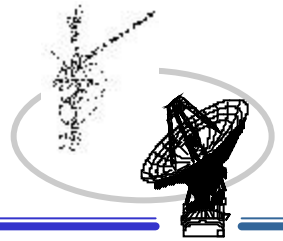
Martin A. Slade

Sept. 20, 2001

NASA Jet Propulsion Laboratory

Joint Users Resource Allocation Planning Committee Meeting

Goldstone Solar System Radar (GSSR)



- **Goldstone Mercury Relativity radar observations were successful on Sept. 02 and Sept. 16**

- **The GSSR X-band transmitter returned to full power (~500 kWatts) for the Sept.02 track. The damaged spare (one of two) has been returned to CPI (Palo Alto) for analysis and repair. Problems with the Transmitter controller appear to have been successfully worked through.**

Honeywell

Honeywell Technology Solutions Inc.
Pasadena Operations
Customer Service Department

Joint Users Resource Allocation Planning Committee

Radio Astronomy and Special Activities

George Martinez

September 20, 2001

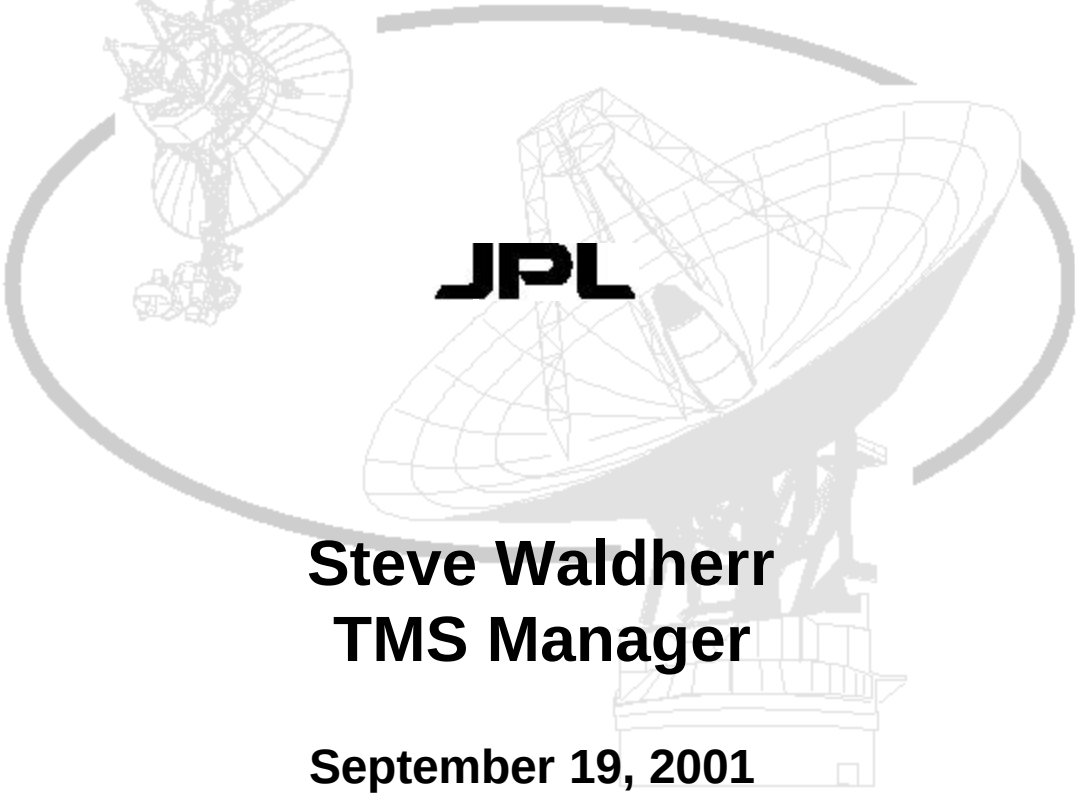
Cat M & E

- **Project Requirements Not Met.**
  - **Last Catalog pass was DOY 209/210 – 1 Baseline.**
  - **Project requirements are: both baselines (15/45, 15/65) every 6 weeks.**
  - **Catalog passes are now overdue.**

- **Concern**
  - **Next Cat M&E experiment is DOY 314/315 (November 10/11) – 1 baseline.**
  - **115 days is too long to go without a Catalog pass.**
  - **Project requirements are not being met.**

INTERPLANETARY NETWORK AND INFORMATION SYSTEMS DIRECTORATE

Flight Project Report
MAP/ACE/IMAGE



Steve Waldherr
TMS Manager

September 19, 2001

MAP

- Spacecraft operations continue nominally
- Successfully completed the MCCM2 Maneuver on 14 September 2001
- MAP continues within the 90 day cruise phase to the L-2 destination with support from the 70-meter.
- MAP should reach L-2 destination mid October 2001
- UPL D2 demos are planned to begin at GDSCC 1 October 2001

ACE

- ACE operations continue nominally
- Series of small attitude maneuvers supported by 26-meter and 34-meter
  - Friday September 14, 2001 @15:06:48
  - Thursday September 20, 2001 @13:55:00
  - Wednesday September 26, 2001 @14:15:00
  - Tuesday October 2, 2001 @15:30:00
  - Monday October 8, 2001 @15:45:00
- ACE 26-meter Automation MVTs completed at DTF-21 3 Sept
  - Demos are still pending and are being planned
- UPL D2 Demos are planned to begin at GDSCC 1 October

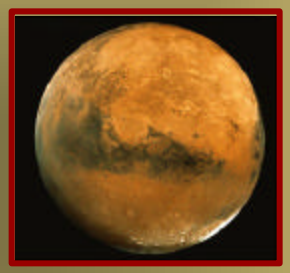
IMAGE

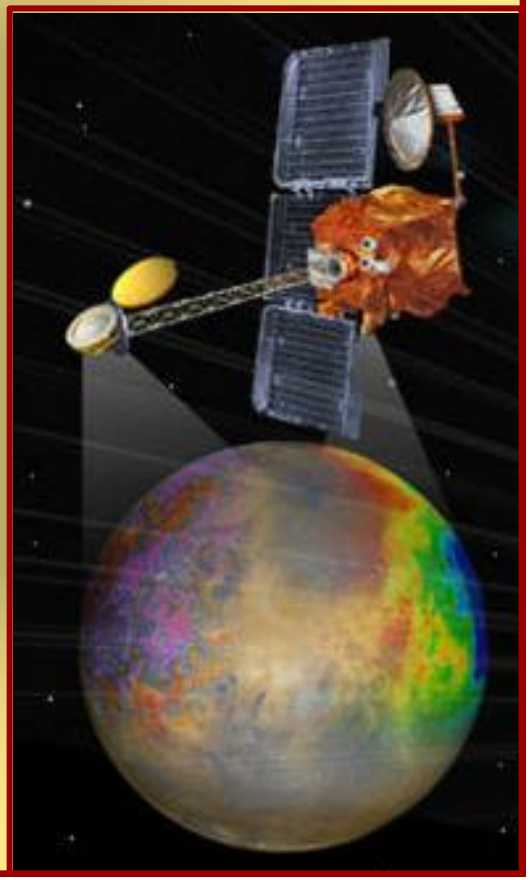
- Spacecraft operations continue nominally
- 26-meter automation MVTs completed at DTF-21 3 September
- 26-meter automation demos are planned for week of 24 September
- UPL D2 demos are planned to begin at GDSCC 1 October 2001

Mars Mission Management Office

Presentation to the

Joint Users Resource Allocation Planning (JURAP) Meeting





E. E. Brower

September 20, 2001

http://mars.jpl.nasa.gov/missions/present/globalsurveyor.html

AGENDA

- Color Status
- Recent Events/Accomplishments
- Issues

COLOR STATUS

	July	Aug	Sept.
•FLIGHT OPERATIONS			
–SPACECRAFT	G	G	G
–NAVIGATION	G	G	G
–MISSION PLAN/SEQUENCE	G	G	G
•SCIENCE	G	G	G
•FLIGHT SUPPORT			
–GROUND DATA SYSTEM	G	G	G

Recent Accomplishments

- 188 ROTO Sequences executed to date.
- Relay16 implemented
- Special MGS issue of JGR released. One-year mapping report: 28 papers (>600 pages).
- Contingency recovery procedures revised
- Implemented ROTO during comm. periods capability
- E2 proposal submitted to Code S Mars Program Manager: PQ report analysis in progress for E1 ops., lifetime, and E2 ops.

Recent Events

- Since August 1:

– Bistatic radar observations	AUG 5
– E2 Mission proposal	AUG 15
– Relay16 orientation	AUG 15
– C-mode Recovery Procedure Review	AUG 15
– ROTO capability during comm. orbits	AUG 27
– C-mode entry	SEP 6
– PSG at JPL	SEP 6
– C-mode recovery/causal review	SEP 8, 14
– MOLA Diagnostic Test#4	SEP 12

UPCOMING EVENTS

- Next Month:

– Complete Delta DORs for MER	AUG-SEP
– PQ Report Submittal to PQ Officer	SEP 30
– MOC focus tests	OCT 8-15
– Second year mapping archive complete	OCT 30
– Odyssey A/B support	OCT23 -JAN, 2002

Issues

- None

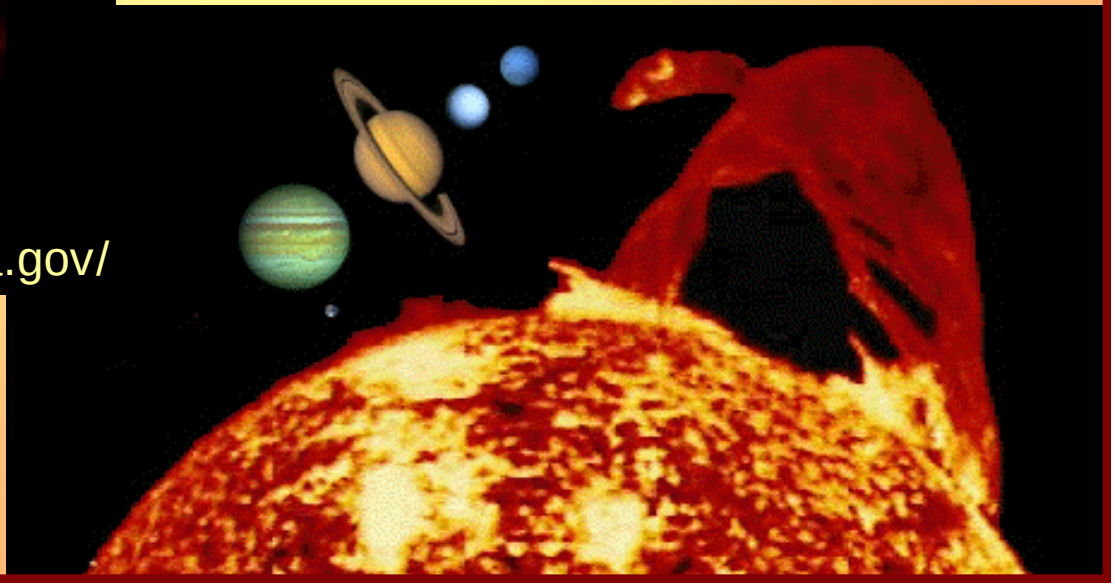
ulysses

JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

I. J. Webb

September 20, 2001

NASA Jet Propulsion Laboratory



ULYSSES

JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

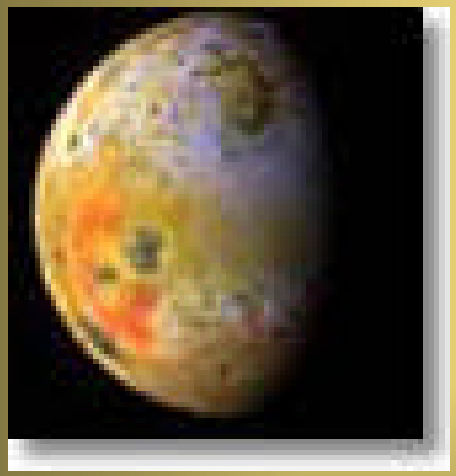
- **SPACECRAFT OPERATIONS ARE NORMAL. THE SPACECRAFT IS IN IT'S SECOND ORBIT AROUND THE SUN AND IS CURRENTLY IN NUTATION OPERATIONS. INSTRUMENT CALIBRATIONS AND RECONFIGURATIONS ARE PERFORMED AS REQUIRED.**

- **DOY 240 - ECC - ULYSSES OPERATIONS SUPPORTEN AN ECC TEST ON AUGUST 28TH. DSS-14 TELEMETRY AND MONITOR WAS SUCCESSFULLY PROCESSED. DSS-14 COMMAND WAS ALSO SUCCESSFULLY EXERCISED IN THE WATERLOAD.**

- **DOY 242/05:14 - DSS-24, ANTENNA TRACKING IN THE WRONG CABLEWRAP. LOST 20 MINUTES OF TELEMETRY AND COMMAND.**

- **DOY 246 - DSS-24, STATION DECLARED RED DUE TO THE ANTENNA SUSTAINING DAMAGE TO THE ANTENNA AZIMUTH GEAR, ANTENNA CABLES AND CABLE TRAY ASSEMBLY. ETO - ONE MONTH? ULYSSES HAD TWO ADDITIONAL PASSES WITH DSS-24, WHICH WERE REPLACED BY SIX DIFFERENT STATIONS (DSS 15 / 54 / 14 - DSS 14 / 65 / 14). ULYSSES THANKS THE DSN, DSN SCHEDULING, VOYAGER, CHANDRA AND CLOCK-SYNC FOR ALL THEIR HELP. DSS-24 WAS DECLARED OPERATIONAL ON DOY 250 AT 21:10z.**

JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

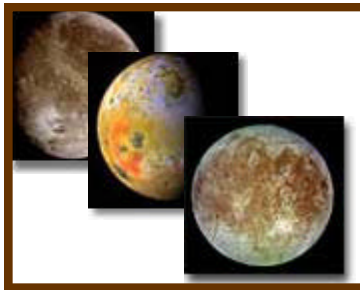


Brad Compton

September 20, 2001

NASA Jet Propulsion Laboratory

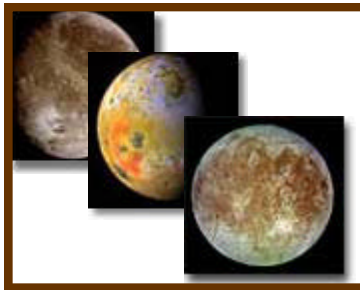
http://galileo.jpl.nasa.gov/



GALILEO EUROPA MISSION

ROUTINE ACTIVITIES

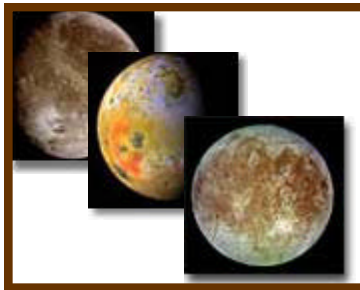
- Attitude maintenance turn
- Propulsion maintenance activities
- DMS conditionings
- Gyro performance test
- Science instrument MROs



GALILEO EUROPA MISSION

SIGNIFICANT EVENTS

- Successful IO encounter (I-31) on 5 August
- Encounter-related problems:
  * Two Despun bus resets handled by on-board recovery s/w
  * Two Near Infrared Mapping Spectrometer (NIMS) memory upsets handled by sequenced reloads
  * SSI camera baseline voltage anomaly resulted in the loss of closest approach Io imaging
  * DSS 43 subreflector controller problem caused considerable data outages in the days before and just after closest approach
- Performed three Orbit Trim Maneuvers (OTM-98 through 101)
- Executed Near Infrared Mapping Spectrometer (NIMS) calibration
- Initiated playback



GALILEO EUROPA MISSION

PROJECT PLANS

- Continue routine activities
- Complete I-31 encounter data playback
- Next encounter I-32 on 16 October

Joint Users Resource Allocation Planning Meeting

Kathy Moyd

September 20, 2001

JPL

SPECTRUMASTRO

DS1 STATUS

Previous Two Month's Activities and Current Status

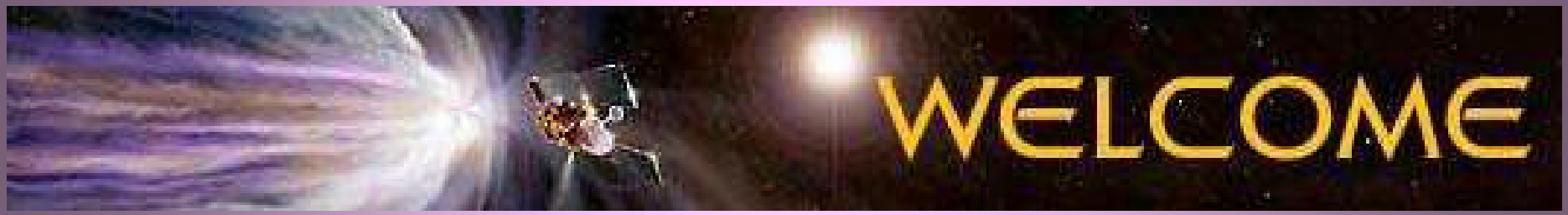
- **Thrusting in North or South ecliptic directions until September 9, then Earth-pointed except for observations of Borrelly and TCMs.**
- **Three losses of lock on attitude-control star**
  - **Combination of long exposure and stray light artifacts confused attitude control system.**
  - **Coronal mass emission caused noise in camera .**
  - **One of the Earth-point stars was a double star with just the wrong separation, causing confusion.**
- **Two DDOR activities confirmed the correctness of the trajectory derived from Doppler and ranging.**

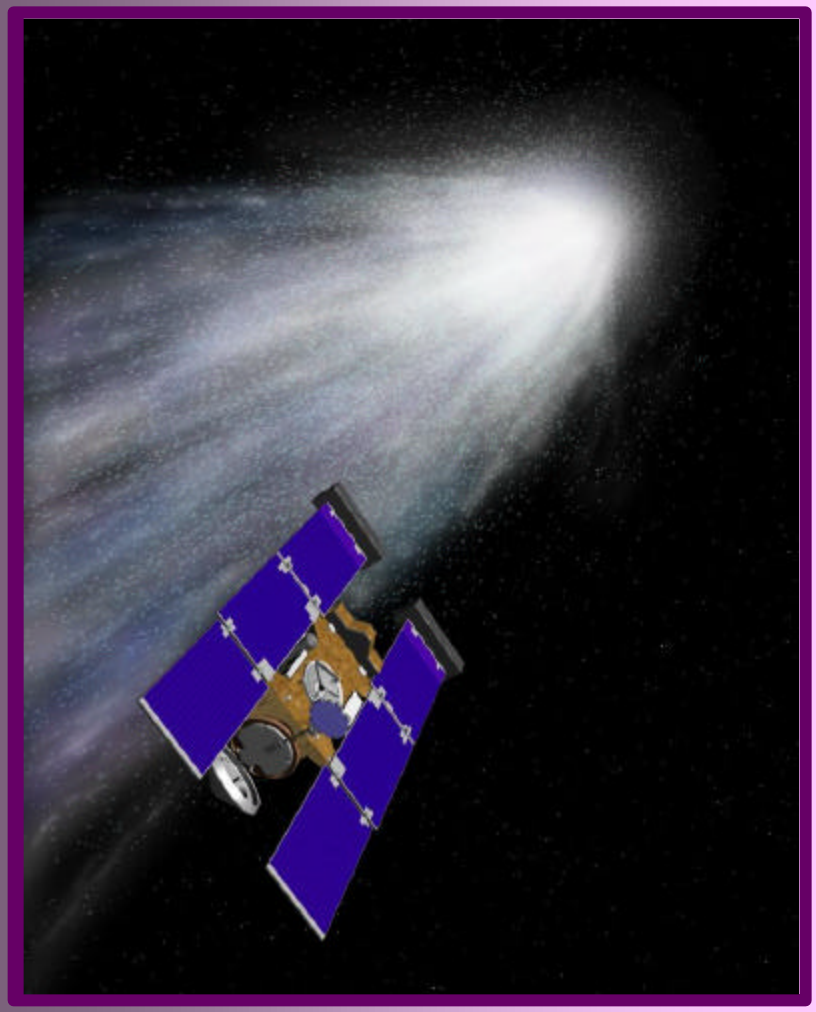
Near Term Plans

- **Two more Short Observations of Borrelly.**

- Possibility of one or two more TCMs, probably only using ion engine (thus saving our limited hydrazine)
- Comet Borrelly encounter will occur September 22, 2001 at ~22:30 UTC (3:30 PM PDT).

- Flyby distance ~2240 km.
- Will uplink final corrections to time of closest approach, ephemeris and exposure selection ~6 hours before closest approach.
- "Hyper-extended" mission has been funded for ~ 6 weeks to analyze ion engine and solar panel state after three years of use.





STARDUST

JOINT USERS
RESOURCE ALLOCATION
PLANNING COMMITTEE

R. E. Ryan

September 20, 2001

NASA Jet Propulsion Laboratory

http://stardust.jpl.nasa.gov

STATUS

- **SPACECRAFT IS HEALTHY (9/20/01)**
- **PRESENTLY 2.7 AU from EARTH**

(Will reach 3.6 in Jan '02)

- **00:45:00 RTLT**
- **2.3 AU from SUN**

- **SPACECRAFT IS IN NOMINAL CRUISE**
  - **BIT RATE IS AT 504 bps (on HGA)**
  - **SAFE-MODE INCIDENT OCCURRED ON AUGUST 15**
    - **SIMILAR TO SAFE-MODE OF 10/00**
    - **CORRECTED WITH FSW PATCHES FOR INTERFACE TIMING (8/21)**
  - **NAV CAMERA AND STAR CAMERA CHECKED ON AUGUST 30**
    - **2 NAVCAM AND 4 STAR CAM IMAGES OF EXCELLENT QUALITY.**

- **CURRENT ACTIVITIES**
  - **ON-GOING EFFORT ON SPACECRAFT FLIGHT SOFTWARE PATCHES**
    - **9 OF 14 NOW ON-BOARD**
  - **PLANNING AND TESTING FOR ENCOUNTER**
    - **POSSIBLE USE OF ANNEFRANK (11/02) AS READINESS TEST FOR COMET WILD-2**
  - **REVIEWING EARTH RETURN NAVIGATION PLAN**

- **TMOD SUPPORT HAS BEEN GOOD THIS PAST PERIOD**

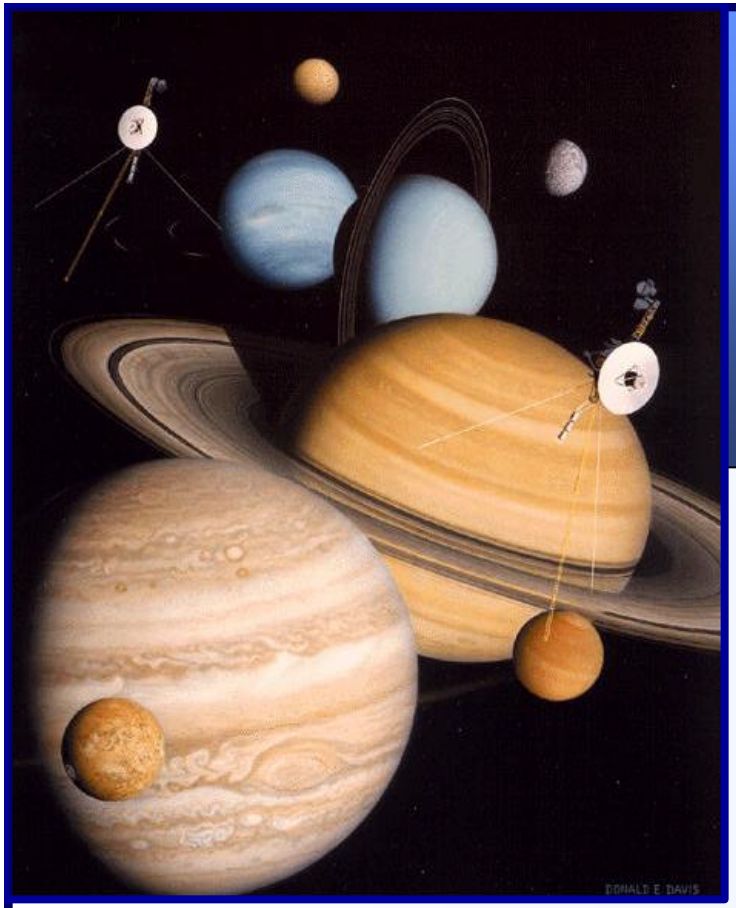
http://stardust.jpl.nasa.gov

CHECK OUT THIS HOMEPAGE

UPCOMING EVENTS

SUPERIOR CONJUNCTION ON DECEMBER 25
Earth 3.5 AU
Sun 2.6 AU
One Degree SEP

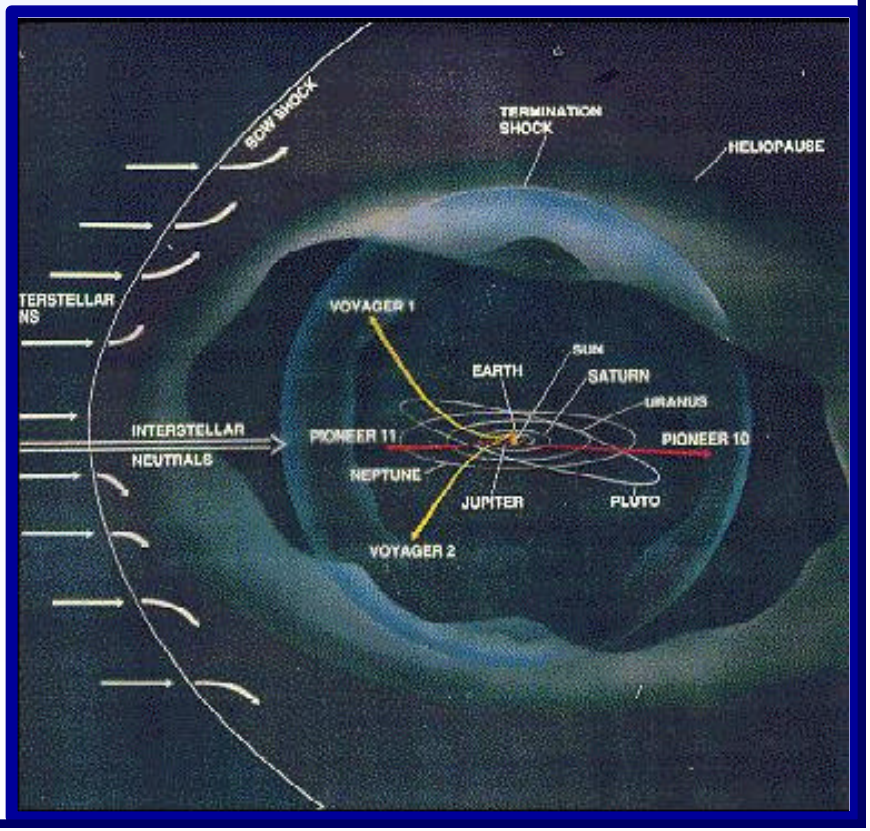
DSM-2 (TCM-7) March 13, 2002



VOYAGER

FLIGHT OPERATIONS

JOINT USERS RESOURCE ALLOCATION PLANNING COMMITTEE

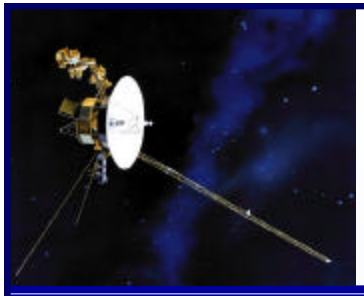


J. C. Hall, Jr.

September 20, 2001

NASA Jet Propulsion Laboratory

http://vraptor.jpl.nasa.gov



VOYAGER

FLIGHT OPERATIONS

JPL

FLIGHT SYSTEM STATUS

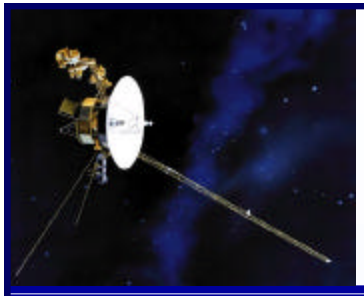
MISSION STATUS

VOYAGER 1

* HELIOCENTRIC DISTANCE – 82.3 AU, RTLT – 22h51m36s
- SPACECRAFT REMAINS HEALTHY
- MAJOR ACTIVITY: PLAYBACK, MAGROLS

VOYAGER 2

* HELIOCENTRIC DISTANCE – 65.0 AU, RTLT – 17h55m38s
- SPACECRAFT REMAINS HEALTHY
- MAJOR ACTIVITY: PLAYBACKS, ASCAL, & MAGROLS



VOYAGER

FLIGHT OPERATIONS

JPL

GROUND SYSTEM STATUS

(July 14, 2001 - September 14, 2001)

DSN - OVERALL SUPPORT – GOOD

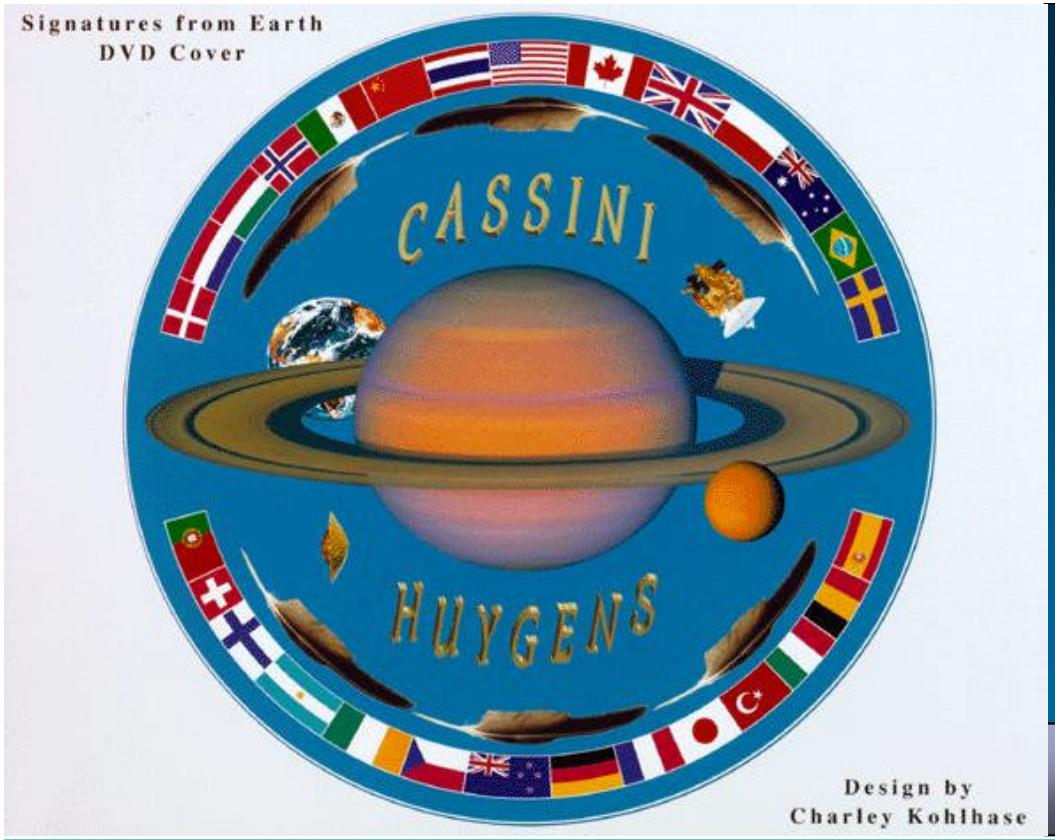
TOTAL SUPPORT TIME, OUTAGE TIME, % of OUTAGE TIME

S/C	SCHED SUPPORT	ACTUAL SUPPORT	70M TIME	SIGNIFICANT OUTAGE TIME	% of OUTAGE TIME
31	642.1	627.4*	91.5	11.7 (3.3)	2.4
32	520.9	521.0**	282.9	1.6 (1.7)	0.6

***Released 4.1 hours of DSS-65 support to STARDUST. Released 4.5 hours of DSS-15 support and 1.6 hours of DSS-14 support to Ulysses**

**** Released 1.8 hours of DSS-34 support to MAP and 3.5 hours of DSS-34 support to another mission.**

VOYAGER HOMEPAGE - http://vraptor.jpl.nasa.gov



CASSINI

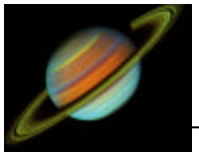
http://www.jpl.nasa.gov/cassini/

Joint Users Resource Allocation Planning (JURAP) Committee Meeting

Dave Doody

September 20, 2001

NASA / Jet Propulsion Laboratory



Cassini

- In Quiet Cruise Subphase through 8 July 2002
  - S/C remains HGA-to-Earth except for specific short activities
  - Cassini Aces are lending support to DS1 operations during their encounter-period
- Gravitational Wave Experiment (GWE) System Test #2 completed
  - Coherent Ka-band links, Monopulse, Aberration Correction, NMC 1.3 demonstrated
  - DSMS Development is working on some problems seen with Monopulse
  - GWE begins 26 November 2001, continues through 5 January 2002
    - 24 hours/day, 7 days/week DSN coverage for 40 days and 40 nights*!*
    - This will be Cassini's first prime mission science
- Operations are Basically Nominal
  - Excellent DSN support
    - RNG problem under investigation
    - NOP being revised
  - Minor S/C instrument anomalies being worked and recovered near real time
    - RSS Ka-Translator-lock anomaly investigation progressing
      - Designer consulting with RSS team, failure mode candidate being evaluated